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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,269	02/13/2002	Hiroki Konaka	401571	6817

23548 7590 11/18/2004
LEYDIG VOIT & MAYER, LTD
700 THIRTEENTH ST. NW
SUITE 300
WASHINGTON, DC 20005-3960

EXAMINER

NELSON, ALECIA DIANE

ART UNIT PAPER NUMBER

2675

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,269

Applicant(s)

KONAKA ET AL.

Examiner

Alecia D. Nelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/15/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (9 or (g) prior art under 35 U.S.C. 103(a).

3. **Claims 1-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukazawa et al. (U.S. Patent No. 5,371,683) in view of Petler (U.S. Patent No. 5,542,034)

With reference to **claims 1, 2, and 10**, Fukazawa teaches a LSI design support system for making a functional design of LSI using a graphic input method (see abstract); comprising state set editing means (1) for adding/deleting states of a

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composite display part having a plurality of states', event handling editing means (3) for describing event handling for a state transition in each of the states of the composite display part (9).

Fukazawa fails to specifically teach an elementary display part storing means for storing elementary display pads designed previously, however does teach the usage of the composite display pad as explained above (see column 5, 42-48).

Petler teaches a storage memory element (12) and additional storage memory elements (13) which is used as determined by the current state of the finite state machine. Also, a next state logic block (11) determines the next values (15) for storage element (12) and storage element (13) using inputs (14) and registered output (17), which are the current values held in storage elements (12) and storage elements (13). The current state of the finite state machine is determined by registered outputs (17), wherein when more than one stat has the same combination of the values held in storage elements (12), there are a sufficient number of storage elements within storage elements (13) (see column 3, lines 2-20)

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the usage of the memory elements, as taught by Petler in a device similar to that which is taught by Fukazawa so that each state has a unique combination of registered outputs.

With reference to **claims 3 and 4**, Fukazawa teaches that the state transition diagram preparation portion (1) has a function of editor and shows transitional

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relationships of operational states of the CPU, wherein the state transition diagram prepared by the state transition diagram preparation portion (1) is displayed on the picture plane in a form of multi-window (see column 5, lines 51-61).

With reference to **claim 5**, Fukazawa fails to teach the usage of the elementary display part, which is stored in the elementary display part storing means, has properties corresponding to size, position, external appearance and behavior, however does teach that the editorial function for alteration or modification includes addition, insertion and elimination of the condition signals and the condition values (see column 6, lines 25-31).

Petler teaches a storage memory element (12) and additional storage memory elements (13) which is used as determined by the current state of the finite state machine. Also, a next state logic block (11) determines the next values (15) for storage element (12) and storage element (13) using inputs (14) and registered output (17), which are the current values held in storage elements (12) and storage elements (13). The current state of the finite state machine is determined by registered outputstl(7), wherein when more than one stat has the same combination of the values held in storage elements (12), there are a sufficient number of storage elements within storage elements (13) (see column 3, lines 2-20)

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the usage of the memory elements, as taught by Petler in

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a device similar to that which is taught by Fukazawa so that each state has a unique combination of registered outputs.

With reference to **claims 6**, Fukazawa teaches a composite display part property setting means which adds/deletes the properties representative of behaviors of the composite display pad, wherein the property editing means edits the properties of the composite display pad added to each state (see column 6, line 36-60).

With reference to **claim 7**, Fukazawa fails to specifically teach the property editing means (3) is arranged to describe the properties of the display pad, or the composite display pad by referencing values of the properties of another display parts (see column 6, lines 36-60).

Fukazawa fails to specifically teach the elementary display part however this is explained above with reference to the teachings of Petler.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the usage of the memory elements, as taught by Petler in a device similar to that which is taught by Fukazawa so that each state machine that is capable of describing the properties of the display part in order to provide a system which allows facile function and reduce the design term.

With reference to **claims 8 and 9**, Fukazawa teaches that the state display editing means displays, graphically, disposition of the display pad while editing

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properties and information concerning layout such as size or dimension through direct manipulation with an input device (see column 45-51). With further reference to claim 9, editing is carried out by activating one of the property editing means (see column 6, lines 28-32).

With reference to **claim 11**, Fukazawa teaches a virtual display part storing means for storing virtual display parts having functions realized virtually by the simulation means (see column 12, line 55-column 13, line 11).

Response to Arguments

4. Applicant's arguments filed 2/25/04 have been fully considered but they are not persuasive. The applicant's statements directed to the 112 rejection applied to **claim 12** is agreed upon by the examiner, and the 112 rejection has been withdrawn. It is further argued that the references used in the rejection are non-analogous, are not reasonably pertinent to the particular problem with which applicants were concerned, and fails to teach or suggest all the limitations of the claims. However, the cited references Fukazawa and Petler teach the claimed limitations as explained above. Further the intended usage of the references are compared with the claimed limitations is irrelevant. Examination is based on the claimed limitations and not the invention's intended usage. Therefore the rejection will be maintained and made final.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alecia D. Nelson whose telephone number is (703) 305-0143. The examiner can normally be reached on Monday-Friday 9:30-6:00. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

adh/ADN
November 15, 2004



AMR A. AWAD
PRIMARY EXAMINER